

## THE CLAIMS

What is claimed is:

- 5      1.      Primary composition comprising at least one  
lipophilic bioactive compound and a whey protein  
in an amount effective to increase the  
bioavailability of the lipophilic bioactive  
compound.
- 10      2.      Primary composition according to Claim 1, wherein  
the lipophilic bioactive compound is obtained,  
extracted, enriched or purified from a plant,  
microorganism, yeast or product of animal origin.
- 15      3.      Primary composition according to Claim 2, wherein  
the plant is tomatoes, soya, green tea, green  
coffee beans, spices, grapes, cocoa, ginger or  
cereals.
- 20      4.      Primary composition according to Claim 2, wherein  
the microorganism is any type of bacterium which  
produces a lipophilic bioactive compound.
- 25      5.      Primary composition according to Claim 2, wherein  
the yeast is a yeast which produces a lipophilic  
bioactive compound.
- 30      6.      Primary composition according to Claim 2, wherein  
the product of animal origin is chosen from the  
group consisting of a liver extract and a milk  
fraction.
- 35      7.      Primary composition according to Claim 1, wherein  
the lipophilic bioactive compound is a carotenoid,  
polyphenol, lipophilic vitamin, flavonoid,

isoflavone, curcuminoid, ceramide,  
proanthocyanidin, terpenoid, sterol, phytosterol,  
sterol ester, tocotrienol, squalene, or retinoid,  
alone or as a mixture.

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8. Primary composition according to Claim 1, wherein  
the lipophilic bioactive compound is a tomato  
extract, a soybean extract or a mixture thereof.

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9. Primary composition according to Claim 1 in the  
form of a powder, gel or liquid and which further  
comprises at least one of vitamin C or tocopherol.

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10. Primary composition according to Claim 1, which  
further comprises at least one of an emulsifier, a  
stabilizer or another additive.

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11. Primary composition according to Claim 1, wherein  
the lipophilic bioactive compound is present in an  
amount of about 0.05 to 50% by weight of the  
composition and the whey protein is present in an  
amount of about 5 to 90% of the composition.

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12. Primary composition according to Claim 11, wherein  
the whey protein and lipophilic bioactive compound  
are present in a weight ratio of about 1:1 to  
500:1.

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13. A primary composition comprising at least one  
lipophilic bioactive compound of a tomato  
oleoresin, a soybean extract, or a mixture  
thereof, and a whey protein in an amount effective  
to increase the bioavailability of the lipophilic  
bioactive compound.

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14. Oral composition comprising the primary composition according to Claim 1 in a foodstuff, in a food supplement, in a cosmetic preparation or in a pharmaceutical preparation.
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15. Oral composition according to Claim 14, wherein the foodstuff is a yogurt, a liquid drink, a chocolate containing product, an ice cream, cereal, coffee or animal food.
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16. Oral composition according to Claim 14, wherein the food supplement further comprises at least one of a sweetener, a stabilizer, a flavoring and a colorant and is provided in the form of sugar-coated tablets, pills, gelatin capsules, a syrup, a gel or a cream.
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17. Oral composition according to Claim 14, wherein the cosmetic preparation additionally comprises a compound active with respect to the skin.
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18. Oral composition according to Claim 14, wherein the content of the primary composition is between about 0.001 and 100%.
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19. Oral composition according to Claim 18, wherein the content of the primary composition is between about 10 and 50%.
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20. Cosmetic composition comprising the primary composition according to Claim 1.
21. Cosmetic composition according to Claim 20, wherein the content of primary composition is between about  $10^{-10}\%$  and 10%.
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22. A method for protecting skin tissue against ageing which comprises administering to a subject in need of such protection the primary composition of Claim 1.

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23. A method for protecting skin tissue against ageing which comprises administering to a subject in need of such protection the oral composition of Claim 14.

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24. A method for protecting skin tissue against ageing which comprises administering to a subject in need of such protection the cosmetic composition according to Claim 20.

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*25*  
*23.* A process for the preparation of a primary composition according to Claim 1, which comprises associating the whey protein with the lipophilic bioactive compound under conditions sufficient to form the composition a mixture.

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*24*  
*24.* The process according to Claim 23, wherein the composition is formed by dissolving the whey protein in water to form a first solution, dissolving the lipophilic bioactive compound in a solvent to form a second solution, combining the two solutions, and evaporating the solvent to form the composition as a dispersion.

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*27*  
*25.* The process according to Claim 23, wherein the composition is formed by mixing the lipophilic bioactive compound with a solvent to form a first mixture, mixing the first mixture with the whey protein in the form of a powder to form a second mixture and evaporating the solvent from the

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second mixture to produce the composition as a dry powder.

*pull 26* 5 <sup>28</sup> 26. The process according to Claim 24, wherein the solvent is acetone, ethanol, isopropanol or mixtures thereof.

<sup>29</sup> 27. The process according to Claim 25, wherein the solvent is acetone, ethanol, isopropanol or mixtures thereof.

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